

Weekly Report for 2015/08/31-2015/09/06

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Progress

1. TCPTree Project

2. Revise vis 2015 submission

I talked with Prof. Qu. He suggested me to consider three things

- 1) Matrix reordering + edge impact + time consistency
- 2) A temporal overview
- 3) Matrix kde + glyph design

I need to find related works to read and see the potential of these three directions.

I also talked Lin Tao. He said he has project to do during the day and can do the research at night.

3. Large Graph Visualization

- 1) Data

We received the sample data this week. I constructed the graph from the data, and extracted ego network from the graph. I visualized one ego network, as shown in Figure 1.

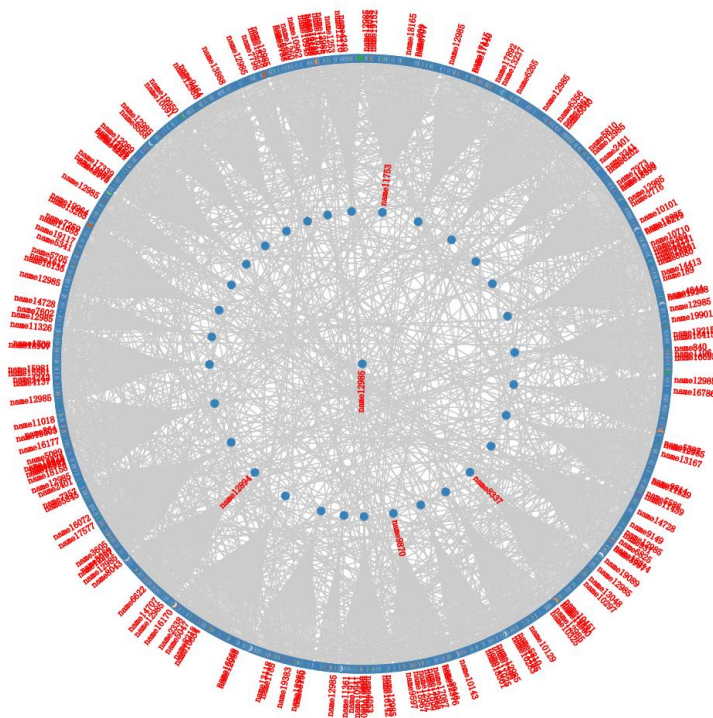


Figure 1

As there are around 1500 nodes in the ego network, I filtered out the nodes that are not key objects. And then clustered the nodes, as shown in Figure 2

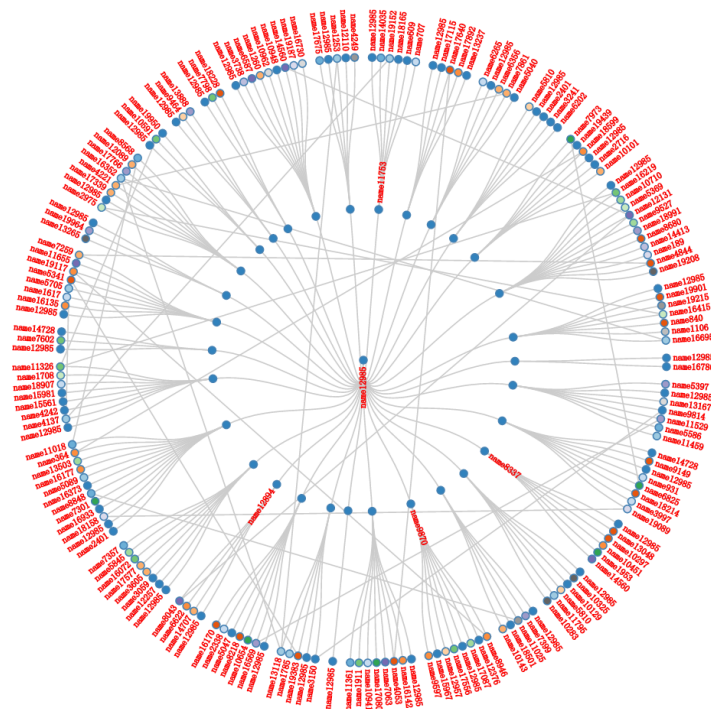


Figure 2

The clustering algorithm I used is based on random walks and dendrogram. I think after rearrange the nodes in the ego network, the cluster structure will be better shown. I will finish the layout next week.

2) Tasks

I divided the tasks of this project roughly with Yuxin Ma, we'll discuss with Biao Zhu and start the project next week.

3) Document

I revised the documents.

Plan

1. TCPTree Project

Finish variable tree.

Finish the control panel and other interactions.

2. Revise vis2015 submission

3. Large Graph

1) Finish the design document.

2) Relayout the ego network and apply voronoi.

Apply the cluster and voronoi plan on the data, and test the performance.